

TORNADOES IN THE UNITED STATES DURING 1948

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During 1948, 195 tornadoes were reported in the United States. This number is 53 more than the annual average, based on the period from 1916 through 1947. They occurred on 72 days and in 30 States. Ten crossed State boundaries. Georgia reported 23 tornadoes, the greatest number in any State during the year, but none of these were unusually destructive. The greatest amount of damage in Georgia by a single twister was reported on April 1, from Ware, Pierce, and Wayne Counties, where property losses amounted to \$250,000 and two of the three deaths reported for the entire year occurred. Illinois had the second greatest number with 22 tornadoes, followed by Oklahoma with 19, Kansas with 17, and Texas with 16. Tornadoes were reported during each month, except December. March brought the greatest number, with 52 occurring during the month; April was second with 33, and May, the month in which the largest number usually occurs, was third with 29.

Although the number of tornadoes during the year was over a third greater than the average, the 141 deaths resulting were only about three-fifths of the average yearly total. The greatest loss of human life occurred in March, when 81 persons were killed. Of this number, 33 deaths were reported in Illinois, 20 in Indiana, 13 in Oklahoma, 6 in Ohio, 4 in Missouri, 3 in Alabama, and 2 in Kentucky, due to a series of tornadoes that swept across the country from Oklahoma to Pennsylvania during that month. Illinois also suffered the greatest loss of life for the year with a total of 37, followed by Indiana with 21, Oklahoma with 17, and Mississippi with 16.

The total estimated property damage of \$53,977,650 for the year was nearly $4\frac{1}{2}$ times the yearly average. Never before in 33 years of record has the financial loss been so great. This evidently is due partly to the increased valuation of property at this time. More than one-half of this damage occurred during the month of March. Oklahoma reported the greatest amount of damage for the year, with losses amounting to over \$17,500,000. Nearly \$17,000,000 of the Oklahoma damage occurred during March when over \$10,000,000 in damage was reported at Will Rogers and Tinker Fields, Oklahoma City, Okla., on March 20 and within a week another \$6,000,000 damage resulted from a second tornado at Tinker Field. The State suffering the next highest 1948 property loss was Kansas, with damage amounting to \$11,047,500; Illinois reported losses of \$7,408,000, Indiana \$3,410,000, Texas \$2,944,000, Ohio \$2,450,000, and Nebraska, Missouri, and Iowa over \$1,000,000 each.

Although the tornado which occurred at Will Rogers and Tinker Fields on March 20, and the one at Tinker Field 5 days later were the outstanding tornadoes of the year in regard to great property damage from single tornadoes, they were very unusual in that they caused no loss of life and only 9 slight injuries. The series of tornadoes which swept across the country on March 18

and 19 caused the greatest loss of life. On the 19th, the towns of Bunker Hill and Gillespie, Ill., were hard hit. Property damage was estimated at \$3,000,000, with 249 homes completely destroyed, 425 homes damaged, 520 other buildings destroyed, and 800 damaged. The death toll was 24, and personal injuries 295.

Another severe tornado during March moved north-eastward from Terre Haute to Redkey, Ind., on the 26th, destroying most of Coatsville and severely damaging Danville. It caused 20 deaths and \$3,000,000 property loss.

On March 19, tornadoes struck at scattered points over Ohio. Property damage was estimated in millions of dollars. Six deaths occurred, and approximately 30 persons were injured. On the 25th of this month, a tornado took a toll of 13 lives, caused 44 injuries, and resulted in \$350,000 property damage, as it swept over a path 102 miles long, across Hughes, McIntosh, Muskogee, and Sequoyah Counties, Okla., and then entered Arkansas where much of its violence was lost.

On June 21, another airport was struck by a tornado. Westport Field in southwestern Wichita, Kans., suffered \$1,000,000 damage, mostly to aircraft. Twelve persons were injured, but no deaths were reported.

Several tornado clouds were observed during the year in areas where their occurrence is unusual. On April 11, a long, stringy funnel cloud was seen north of the airport at Cheyenne, Wyo. It was observed for about 10 minutes as it moved from the west-northwest, but it did not appear to reach the ground. Atmospheric conditions were not those usually existing during the occurrence of tornadoes; snow had been falling and the temperature was 33° with dewpoint 32°. Another tornado funnel was sighted and observed for about 20 minutes on May 20, at Billings, Mont. This cloud appeared to be about 35 miles south-southwest of the Billings Weather Bureau Station. The funnel extended and retracted quite rapidly. It reached the ground for a time early in its development, but no damage resulted. Other tornado clouds that remained aloft were observed at Kirtly, Wyo., on July 14 and at Winslow, Ariz., on October 19. At Winslow, a funnel descended from a dark cumulus cloud in a well formed cone and was soon joined by a second very ragged cone. Both cones disappeared without having reached the ground. A noise like rustling of cloth was heard during the life of the larger cone.

The tabulations for 1948 are shown in Table 1, which follows. They are derived from data on "Severe Local Storms" appearing in the MONTHLY WEATHER REVIEW and in the CLIMATOLOGICAL DATA publications for the different sections of the United States. The listing shows the approximate monthly and annual number of tornadoes, the number of resultant deaths and injuries, and the property damage caused in the several States and the country as a whole. The "Tracks of Tornadoes during 1948" are shown by chart.

TABLE 1.—Tornadoes and probable tornadoes during 1948

State*	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alabama:													
Number			4	1									5
Deaths			3	0									3
Injuries			47	3									50
Damage (\$×1,000)			486.0	200.0									686.0
Arizona:													
Number										1			1
Deaths										0			0
Injuries										0			0
Damage (\$×1,000)										0.0			0.0
Arkansas:													
Number			1										1
Deaths			0										0
Injuries			0										0
Damage (\$×1,000)			14.0										14.0
Colorado:													
Number				2									2
Deaths				0									0
Injuries				0									0
Damage (\$×1,000)				(1)									(1)
Florida:													
Number	1		1			2	3		3	3			13
Deaths	0		0			0	0		2	0			2
Injuries	0		0			0	2		12	7			21
Damage (\$×1,000)	25.0		.5			0.2	9.5		254.0	115.0			404.2
Georgia:													
Number			7	5	2		2		1		6		23
Deaths			0	3	0		0		0		0		3
Injuries			0	(1)	0		0		0		0		1
Damage (\$×21,000)			127.5	320.0	11.2		9.5		75.0		150.9		694.1
Illinois:													
Number			9	10		1	1	1					22
Deaths			33	4		0	0	0					37
Injuries			449	29		0	0	0					478
Damage (\$×1,000)			3,962.0	1,726.0		10.0	210.0	1,500.0					7,408.0
Indiana:													
Number	1	1	1	5	2	1							11
Deaths	0	0	0	0	0	0							0
Injuries	0	0	(1)	0	0	20							21
Damage (\$×1,000)	20.0	10.0	3,000.0	100.0	180.0	100.0							3,410.0
Iowa:													
Number				1	1	1	2						5
Deaths				5	0	0	0						5
Injuries				25	1	1	0						27
Damage (\$×1,000)				250.0	1.5	450.0	323.0						1,024.5
Kansas:													
Number			1	2	4	7	2			1			17
Deaths			0	0	2	0	1			0			3
Injuries			(1)	1	5	13	(1)			0			19
Damage (\$×1,000)			200.0	18.0	730.0	1,357.0	8,737.5			5.0			11,047.5
Kentucky:													
Number	1		1	2	1						2		7
Deaths	0		2	1	5						1		9
Injuries	0		(1)	1	(1)						1		1
Damage (\$×1,000)	100.0		15.0	155.0	200.0						75.0		545.0
Louisiana:													
Number					1						2		3
Deaths					0						1		1
Injuries					0						31		31
Damage (\$×1,000)					15.0						445.0		460.0
Maryland:													
Number			1										1
Deaths			0										0
Injuries			0										0
Damage (\$×1,000)			45.0										45.0
Minnesota:													
Number				1									1
Deaths				0									0
Injuries				0									0
Damage (\$×1,000)				50.0									50.0
Mississippi:													
Number	1	2	2								4		9
Deaths	1	5	0								10		16
Injuries	1	25	0								77		103
Damage (\$×1,000)	50.0	115.0	15.0								810.0		990.0
Missouri:													
Number			7	1	2	1							11
Deaths			4	0	0	0							4
Injuries			40	1	2	1							44
Damage (\$×1,000)			546.5	50.0	505.0	5.0							1,106.5
Montana:													
Number					2		2						4
Deaths					0		1						1
Injuries					0		(1)						0
Damage (\$×1,000)					(1)		58.0						58.0
Nebraska:													
Number						4							4
Deaths						1							1
Injuries						0							0
Damage (\$×1,000)						1,511.0							1,511.0
New Mexico:													
Number					1								1
Deaths					0								0
Injuries					0								0
Damage (\$×1,000)					(1)								(1)
North Carolina:													
Number			1										1
Deaths			0										0
Injuries			4										4
Damage (\$×1,000)			43.9										43.9

See footnotes at end of table.

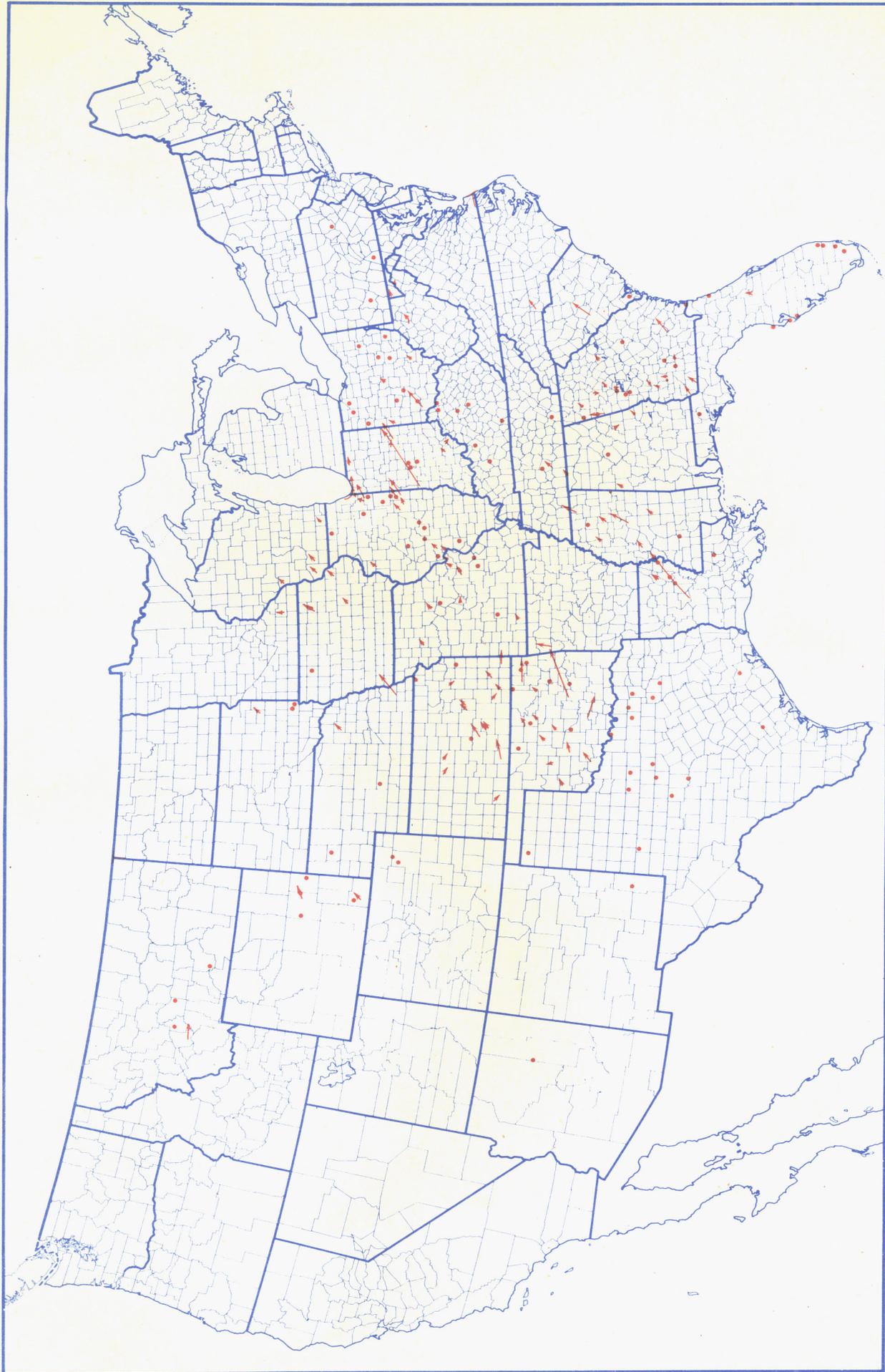
TABLE 1.—Tornadoes and probable tornadoes during 1948—Continued

State*	January	February	March	April	May	June	July	August	Septem-ber	October	Novem-ber	Decem-ber	Total
Ohio:													
Number.....	1		1		3	1							6
Deaths.....	0		6		0	0							6
Injuries.....	0		31		0	0							31
Damage (\$×1,000).....	100.0		2,000.0		350.0	(1)							2,450.0
Oklahoma:													
Number.....			11		4	4							19
Deaths.....			13		4	0							17
Injuries.....			59		204	0							263
Damage (\$×1,000).....			16,979.5		654.0	50.5							17,684.0
Pennsylvania:													
Number.....			1			1	1						3
Deaths.....			0			0	0						0
Injuries.....			3			0	0						3
Damage (\$×1,000).....			(1)			100.0	10.0						110.0
South Carolina:													
Number.....				2									2
Deaths.....				0									0
Injuries.....				(2)									(2)
Damage (\$×1,000).....				112.0									112.0
South Dakota:													
Number.....				3									3
Deaths.....				0									0
Injuries.....				0									0
Damage (\$×1,000).....				50.0									50.0
Tennessee:													
Number.....			2								1		3
Deaths.....			0								0		0
Injuries.....			2								0		2
Damage (\$×1,000).....			700.0								11.4		711.4
Texas:													
Number.....		4	2	1	5		3	1					16
Deaths.....		3	0	0	3		0	0					6
Injuries.....		(1)	6	1	43		0	(1)					50
Damage (\$×1,000).....		175.0	160.0	30.0	2,551.0		3.0	25.0					2,944.0
West Virginia:													
Number.....					1	1							2
Deaths.....					4	0							4
Injuries.....					80	0							80
Damage (\$×1,000).....					250.0	(1)							250.0
Wisconsin:													
Number.....							4						4
Deaths.....							2						2
Injuries.....							13						13
Damage (\$×1,000).....							58.5						58.5
Wyoming:													
Number.....				1	1	1	2						5
Deaths.....				0	0	0	0						0
Injuries.....				0	0	0	0						0
Damage (\$×1,000).....				.0	10.0	100.0	(1)						110.0
Total:													
Number.....	5	7	152	133	129	124	22	2	13	5	13		195
Deaths.....	1	8	81	13	18	2	4	2	0	0	12		141
Injuries.....	1	25	641	60	335	35	15	(2)	12	7	117		1,248
Damage (\$×1,000).....	295.0	300.0	28,294.9	3,061.0	5,457.7	3,683.7	9,419.0	1,625.0	829.0	120.0	1,492.8		53,977.6

* None reported for States not listed.
 † Corrected for boundary-crossing tornadoes.
 ‡ Datum unobtainable.
 § Several.

¶ Not complete.
 ¶ Estimated.

Tracks of Tornadoes during 1948



Dots show location of tornadoes where tracks are too short to indicate on chart.